Impact of increasing temperature of earth

†2109. SHRI DILIP SINGH JUDEV: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether increase in the temperature of the earth is having its direct impact in the country resulting in melting of the glaciers and decline in the thickness of the snow in the Himalayas;

(b) if so, the number of years since its study is being done and the action being taken to check this trend;

(c) whether any direct effect has been noticed so far as a result of the action taken; and

(d) if so, the details thereof?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) Regular monitoring of several glaciers during the last 100 years in major basins of Indian Himalaya from Shyok in west to Changme Khangpu (Tista) in the East have revealed that majority of glaciers in Himalayan region are passing through a phase of recession. Observations indicate that during the past 100 years, mean temperature over the country (India) as a whole has increased by 0.5°C.

(b) to (d) GSI has recently initiated study of two glaciers of Bhaga basin *viz.* Mulkila and Yoche Lungpa in July, 2006 which is likely to continue for two more years.

Department of Science and Technology had started an All-India coordinated programme on Himalayan glaciers in 1988 with a Programme Advisory and Monitoring Committee to study the glaciers of Western and Central Himalaya *i.e.* Gangotri and its tributary glaciers and Chhota Sigri glaciers in Central Himalaya. The glacier recession rate varies from glacier to glacier. Preliminary analysis suggests the recession rate to be of the order of about 10 to 15m/ year for some of the glaciers. However, long-term data with wider coverage of glaciers are required to arrive at a consistent recession rate.

Weather forecast by Meteorological Department

†2110. SHRI MAHENDRA SAHNI: Will the Minister of EARTH SCIENCES be pleased to state:

†Original notice of the question was received in Hindi.

(a) whether it is a fact that despite the issuance of weather forecast by Meteorological Department for the use of farmers since 1977, it is still not reaching the farmers in time;

(b) if so, the reasons therefor; and

(c) the number of districts of the country where facility of weather forecast is accessible to the farmers at present alongwith the number of districts which are not getting the same facility?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) No, Sir. India Meteorological Department (IMD) is communicating relevant meteorological information to the farmers on real time basis all over the country. IMD has established specialized centres called Agromet Advisory Service Centre in 23 States to cater to the weather related services for the agricultural community of the country. This information is made available through All India Radio, Doordarshan Kendras, Newspapers, Internet and Extension Wings of State Departments of Agriculture.

Weather forecasts and weather based Agro-advisories are also prepared by the National Centre for Medium Range Weather Forecasting (NCMRWF) based on its forecast models. These forecasts are translated in vernacular languages and disseminated to 107 Agro climatic zones with each zone covering about 5-8 districts. These are transmitted through All India Radio, Doordarshan, Print media, website and personal contact on every Monday and Thursday with four day's lead time. Agromet Advisory Bulletins comprise of expert advise on intercultural operation to be undertaken by the farmers. This includes strategic planning of selection of crop cultiver based on crop and soil conditions alongwith sowing time, seed treatment etc. The advisory also includes adoption of tactical decisions like irrigation scheduling, fertilizer application, pesticide/fungicide spray operation and harvest and post harvest operations.

(b) Does not arise in view of (a).

(c) There are 127 agro climatic zones in the country. Out of these the agro advisories are disseminated to 107 Agro climatic zones that are functional at present with each zone covering about 3-5 districts. it is planned to make rest of the agroclimatic zones functional in a years time.

The advisories over rest of the country are covered through media and State level Agromet Advisory Service Centres.